

ULTRAFIT® WELDED FILTER BAGS

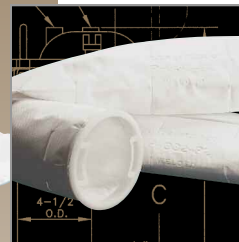
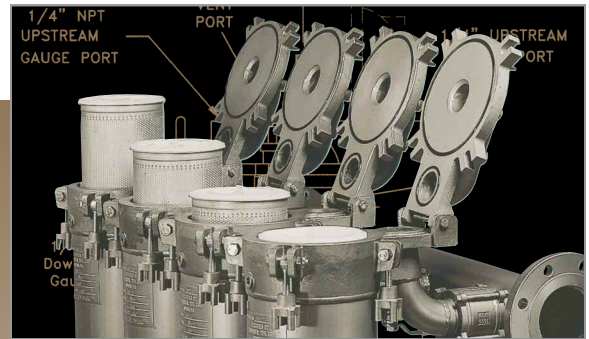
High Performance Liquid Filter Bags

Design

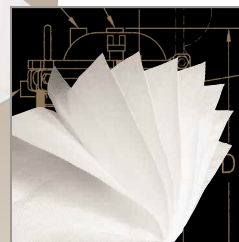
Technology

Performance

Solutions



Ultrafit® Welded Liquid Filter Bags set new standards for high performance liquid filtration using proprietary ultrasonic welding & laminating techniques.



Composite layers of graded-density, melt-blown polypropylene microfibers provide optimum efficiency and enhanced solids loading.

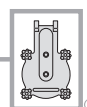


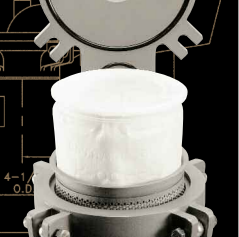
Compression of the unique *Zero-Bypass®* collar by our vessel lid eliminates solids bypass.

We pride ourselves on superior customer service and technical support for industries with Critical Liquid Process Applications. All products are available for prompt delivery, worldwide.

Filtration Systems

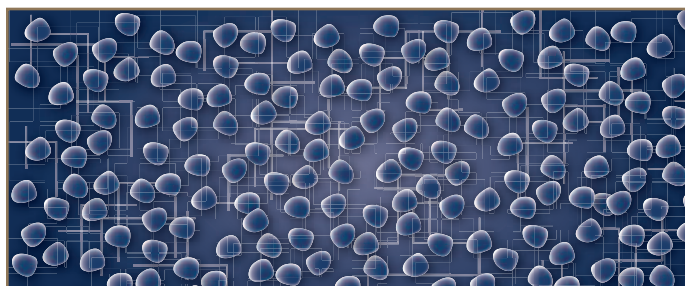
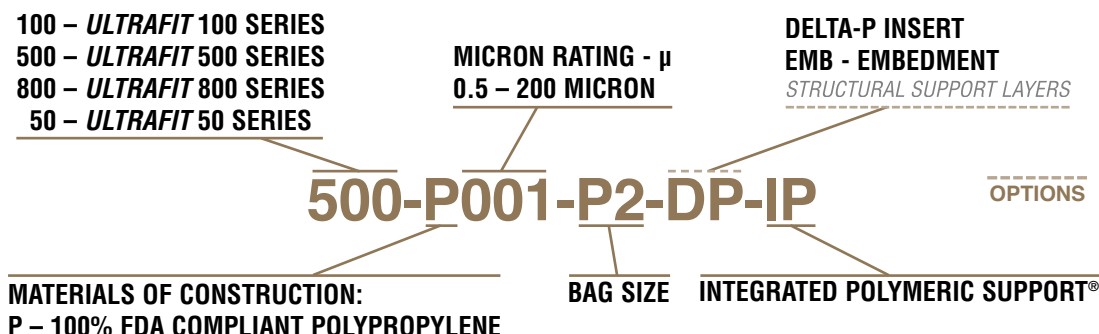
Division of Mechanical Mfg. Corporation



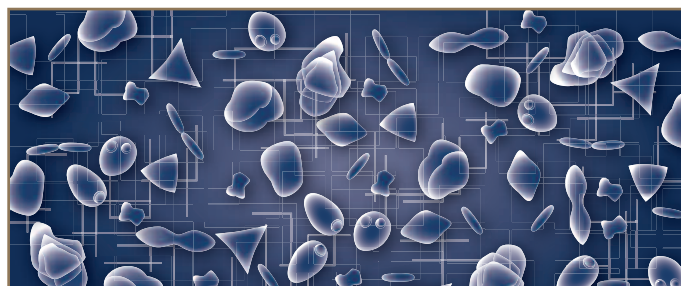


ULTRAFIT® WELDED HIGH PERFORMANCE LIQUID FILTER BAGS

ULTRAFIT WELDED MODEL NUMBER CODING SYSTEM



Ultrafit 100 filter bags are ideally suited to filter liquids where the range of particle size & distribution is more uniform, as illustrated above.



Ultrafit 500 filter bags are designed to filter liquids where particles vary in both size & distribution, as illustrated above.

Ultrafit Welded 100

The Ultrafit Welded 100 liquid filter bag is ideally suited for batch or smaller applications, or as a final filter where the range of particle size is narrower and more consistent. Designed to provide highly efficient liquid filtration for applications requiring consistent levels of purity, this product is superior to either felt bags or cartridges. The *Ultrafit 100* liquid filter bag is constructed of FDA compliant, melt-blown polypropylene microfiber. The use of absolute-rated material achieves 97% filtration efficiency at the micron ratings available. Additional layers of thermally bonded continuous fibers are used to jacket the filtering membrane, providing support to the product and minimizing fiber migration downstream. The result is a superior product at an economical price.

Ultrafit Welded 500

For applications demanding both high loading and efficiency, the Ultrafit Welded 500 filter bag has the unique ability to effectively filter liquids where particles vary in both size and distribution. The *Ultrafit 500* filter bag consists of graded-density layers of meltblown polypropylene, serving as a primary upstream filter. Separately jacketed, this pre-filter collects larger particles, preventing them from prematurely blinding the media below. As fluid progression continues downstream, redundant layers of absolute-rated microfiber capture finer particles, assuring filtration efficiency levels of at least 98% at the micron ratings available.

Integrated Polymeric Support® (IP) and Delta-P Insert (DP)

The IP and DP are structural layers ultrasonically laminated to the internal composite of the *Ultrafit Welded Liquid Filter Bag*. Integrated Polymeric Support and the Delta P Insert allows the filter bag to sustain significantly greater differential pressure before change-out is required, without increasing initial pressure drop. Longer run times allow enhanced solids loading. *Integrated Polymeric Support* is a standard feature of the *Ultrafit Welded 100, 500 & 800 Series* filter bags. The Delta P Insert and Structural Embedment are optional on all *Ultrafit Welded Liquid Filter Bags*.

ULTRAFIT® WELDED HIGH PERFORMANCE LIQUID FILTER BAGS

ULTRAFIT 100 Filter Bag Composition

MODEL NUMBER	MICRON RATING	FILTERING LAYERS (INSIDE TO OUTSIDE)								TOTAL LAYERS	SURFACE AREA sq.ft.
100-P001-P2-IP	1	SL	25μ	1μ	1μ	IP	Z			6	26.4
100-P002-P2-IP	2	SL	25μ	2μ	2μ	IP	Z			6	26.4
100-P005-P2-IP	5	SL	25μ	5μ	5μ	IP	Z			6	26.4
100-P010-P2-IP	10	SL	25μ	10μ	10μ	IP	Z			6	26.4
100-P025-P2-IP	25	SL	50μ	25μ	25μ	IP	Z			6	26.4
100-P050-P2-IP	50	SL	100μ	50μ	50μ	IP	Z			6	26.4
100-P100-P2-IP	100	SL	200μ	100μ	100μ	IP	Z			6	26.4
100-P200-P2-IP	200	SL	200μ	200μ		IP	Z			5	22.0

DIRECTION OF LIQUID FLOW ►

PRE-FILTER ►

FINAL FILTRATION ►

ULTRAFIT 500 Filter Bag Composition

MODEL NUMBER	MICRON RATING	FILTERING LAYERS (INSIDE TO OUTSIDE)										TOTAL LAYERS	SURFACE AREA sq.ft.
500-P000-P2-EXP	0.5	Z	2μ	2μ	2μ	CL	SL	1μ	1μ	IP	Z	10	44.0
500-P001-P2-IP	1	SL	200μ	100μ		CL	SL	1μ	1μ	IP	Z	9	39.6
500-P002-P2-IP	2	SL	200μ	100μ		CL	SL	2μ	2μ	IP	Z	9	39.6
500-P005-P2-IP	5	SL	200μ	100μ		CL	SL	5μ	5μ	IP	Z	9	39.6
500-P010-P2-IP	10	SL	200μ	100μ		CL	SL	10μ	10μ	IP	Z	9	39.6
500-P025-P2-IP	25	SL	200μ	100μ		CL	SL	25μ	25μ	IP	Z	9	39.6
500-P050-P2-IP	50	SL	200μ	100μ		CL	SL	50μ		IP	Z	8	35.2

DIRECTION OF LIQUID FLOW ►

PRE-FILTER ►

FINAL FILTRATION ►

LEGEND

SL = Sieve Layer

Z = Support Jacket

μ = Micron

CL = Core Layer

IP = Integrated Polymeric Support®

Specifications

Materials of Construction (100% FDA Compliant):

Filter Media: Polypropylene Microfiber

IP - Integrated Polymeric Support®: Thermally Bonded Continuous Filament, Non-Fiber Shedding

Sieve Layer: Polypropylene

Support Jacket: Polypropylene, Non-Woven, Non-Fiber Shedding

Zero-Bypass® Collar: Polypropylene

Maximum Operating Temperature: 180°F

Maximum Recommended Flow Rate – P2 Size (water):

Ultrafit 500 EXP – 30gpm (1,800gph)

Ultrafit 500 – IP Series – 60gpm (3,600gph)

Ultrafit 100 – IP Series – 70gpm (4,200gph)

Recommended Change-Out:

Initial pressure plus: 34psig

Available Filter Bag Sizes:

P1 size = 7" dia. x 16" long (100 & 500 Series)

P2 size = 7" dia. x 33" long (100 & 500 Series)

P4 size = 4" dia. x 14" long (100 Series)

P5 size = 4" dia. x 24" long (100 Series)



ULTRAFIT® WELDED HIGH PERFORMANCE LIQUID FILTER BAGS

Ultrafit Welded 800 Series

Sub-Micron, Absolute Rated, Graded-Density, *Composite Layer Design Technology™*

Ideal for high-purity and critical liquid process applications, Ultrafit Welded 800 Filter Bags achieve 99.98% efficiency (Beta 5000), at ratings less than 1 micron. Filter Bags are individually wrapped for cleanliness, packaged 20 pieces per case, and are available in Size #1 & #2.

ULTRAFIT 800 Filter Bag Composition

MODEL NUMBER	MICRON RATING	FILTERING LAYERS (INSIDE TO OUTSIDE)										TOTAL LAYERS	SURFACE AREA sq.ft.
800-P02-P2-EXP	0.2	Z	0.7μ	0.7μ	0.7μ	CL	0.7μ	0.7μ	0.7μ	IP	Z	10	44.0
800-P04-P2-IP	0.4	Z	6.2μ	3.2μ	3.2μ	CL	0.7μ	0.7μ	0.7μ	IP	Z	10	44.0
800-P06-P2-IP	0.6	Z	6.2μ	3.2μ	3.2μ	CL	3.2μ	0.7μ	0.7μ	IP	Z	10	44.0
800-P08-P2-IP	0.8	Z	6.2μ	6.2μ	3.2μ	CL	3.2μ	3.2μ	0.7μ	IP	Z	10	44.0



LEGEND Z = Support Jacket μ = Micron CL = Core Layer IP = Integrated Polymeric Support®

Product Applications

- Micro-filtration for Industrial and Process Liquids
- Pharmaceutical, Biological, Electronic, and Nuclear Applications
- Pre-filtration for Reverse Osmosis Membranes and Expensive Cartridges
- Filtration of Surface Water and Groundwater
- Recycling of Wastewater and Reclaimed Water

Product Features

- Sub-Micron, Absolute Rated Performance... 99.98% efficient, down to 0.2 micron
- Graded-Density, Composite Layer Design... allows enhanced solids loading
- Fully Welded Ultrasonic Construction... eliminates solids bypass
- Zero-Bypass® Collar... assures an optimum compression seal
- Integrated Polymeric Support™... provides superior mechanical strength
- 100% FDA Compliant Materials

Specifications

Materials of Construction (100% FDA Compliant):

Filter Media: Polypropylene Microfiber, ANSI/NSF Standard 61 Certified

IP - Integrated Polymeric Support: Thermally Bonded Continuous Filament, Non-Fiber Shedding

Support Jacket: Polypropylene, Non-Woven, Non-Fiber Shedding

Zero-Bypass Collar: Polypropylene

Maximum Operating Temperature: 180°F

Maximum Recommended Flow Rate – P2 Size (water):

Ultrafit 800 EXP – 15gpm (900gph)

Ultrafit 800 – 25gpm (1,500gph)

Recommended Change-Out:

Initial pressure plus: 45psig

Available Filter Bag Sizes:

#1: (7" dia. x 16" long), #2: (7" dia. x 33" long)

Important note on chemical & thermal compatibility and Ultrafit Welded Liquid Filter Bags

The compatibility data presented in this brochure is for general guidance only. In most cases, the use of a specific filtering material, such as polypropylene, can be safely recommended without special testing. Issues of possible filter bag incompatibility, such as swelling, leaching of the filter bag material into a fluid solution, or disintegration, can only be determined by the user under actual on site operating conditions.

Factors such as degree of concentration of a substance in a fluid, temperature, and duration of filter bag exposure are also factors to be considered. Chemical and thermal compatibility are further defined to include all materials exposed to fluids, such as the filter bag, O-Rings, and filter vessel, under elevated pressure and/or temperature. If chemical and thermal compatibility is in doubt, please check with the manufacturer.

Warranty: Filtration Systems warrants our products to be free from defects in workmanship for a period of one year from the date of purchase, when used in accordance with our specific guidelines. Our only obligation and a customer's remedy, subject to our inspection and evaluation, shall be to replace the product or refund the purchase price.

Limitation of Liability: Filtration Systems shall not be held responsible or liable for any loss resulting from the resale, direct or indirect misuse, incidental or consequential damages, arising out of the use of this product.

Product Specifications: With over 50 years of industry expertise and proven performance, Filtration Systems offers quality products at responsible prices. We continually strive to improve our products through ongoing research and development; therefore, we reserve the right to change specifications without notice.

Intellectual Property: Filtration Systems products offer exclusive manufacturing technology. Our company is committed to protecting its patents, trademarks, and proprietary rights from those who would wrongfully use them.

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Over-The-Top®, Ultrafit®, Accufit®, SuperBond®, APX®, AMT™, Zero-Bypass®, PurSeal®, TruSeam™, IP Series - Integrated Polymeric Support®, EXP® Series, Composite Layer Design Technology™, ELC® Engineered Laminate Composite.

Filtration Systems™

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